

**(This section to be completed by subcontractor requesting document)**

Requestor J. Ramo T. Bennett / 1034A Document Center (is requested to provide the following document)

Date of request 12/8/95 Expected receipt of document 1/8/95

Document number KP-1674 Rev. 1 Date of document 6/24/00

Title and author (if document is unnumbered)

**(This section to be completed by Document Center)**

Date request received 12/12/95

Date submitted to ADC 1/5/96

Date submitted to HSA Coordinator 12/12/95

**(This section to be completed by HSA Coordinator)**

Date submitted to CICO 1/5/96

Date received from CICO 1/24/96

Date submitted to ChemRisk/Shonka and DOE 1/25/96

**(This section to be completed by ChemRisk/Shonka Research Associates, Inc.)**

Date document received \_\_\_\_\_

Signature \_\_\_\_\_

**UNCLASSIFIED**

**KP-1674**

Revision 1

**THEORETICAL WEIGHT PER CENT OF URANIUM  
IN URANIUM COMPOUNDS**

**AUTHORS:**

**F. H. Anderson**

**W. D. McCluen**

**K25RC**

NOT TO BE LOANED FROM  
PLANT RECORDS K-1034

**UNION CARBIDE NUCLEAR COMPANY**  
DIVISION OF UNION CARBIDE CORPORATION

Operating

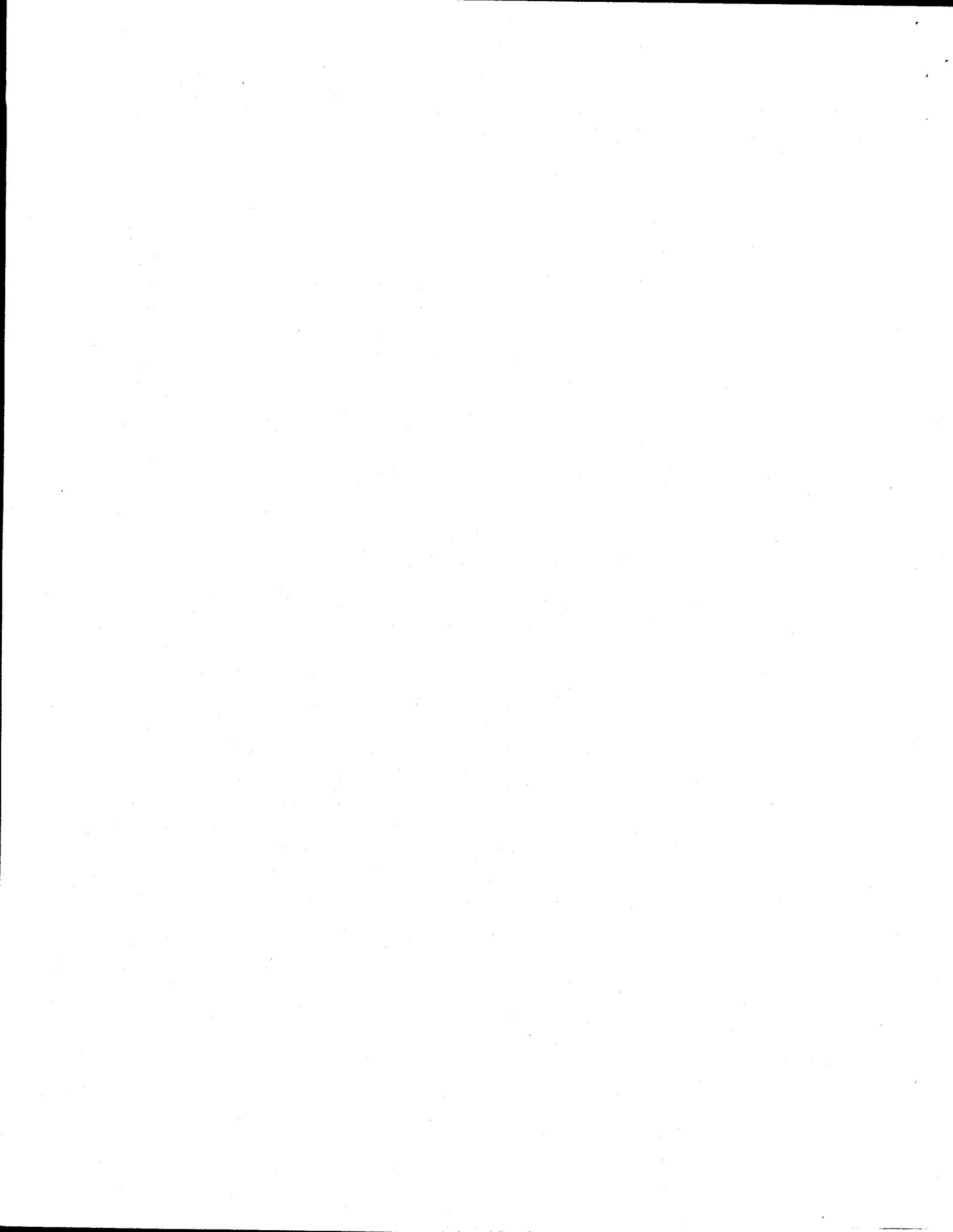
COAL RIDGE GASEOUS DIFFUSION PLANT • OAK RIDGE Y-12 PLANT  
OAK RIDGE NATIONAL LABORATORY • GASEOUS DIFFUSION PLANT

for the Atomic Energy Commission

Under U. S. Government Contract W-7405-eng-2

**UNION  
CARBIDE**

**UNCLASSIFIED**





INTERNAL CORRESPONDENCE

UNION CARBIDE NUCLEAR COMPANY

POST OFFICE BOX P, OAK RIDGE, TENNESSEE

To (Name) Attached Internal Distribution  
Company  
Location

Date June 24, 1960

Originating Dept.

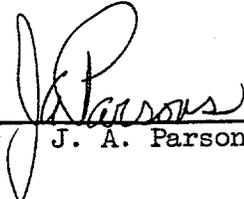
Answering letter date

Copy to

Subject "THEORETICAL WEIGHT PERCENT OF  
URANIUM IN URANIUM COMPOUNDS",

Report - KP-1674, Revision 1

Report KP-1674, Revision 1, "Theoretical Weight Percent of Uranium in Uranium Compounds," is attached. This report is a tabulation of revised uranium conversion factors for specified theoretically pure compounds. This revision specifically incorporates the most recent physical weights for non-uranium elements and the physical to chemical weight conversion factor - 1.000275. Initial use of these revised factors at the Oak Ridge Gaseous Diffusion Plant will be July 1, 1960. At this time Report K-1674 will be superseded by the subject report.

  
J. A. Parsons

JAP:gjd

Date of Issue: June 24, 1960

Title: THEORETICAL WEIGHT  
PERCENT OF URANIUM  
IN URANIUM COMPOUNDS

KP-1674, Revision 1

DISTRIBUTION

- |   |   |
|---|---|
| 1. Center, C. E.                              | 29 - 58. <u>Production and Process Engineering Division</u> |
| 2. Emlet, L. B.                               | Allen, A. L.  |
| 3. Hildebrand, W. H.                          | Anderson, F. H.   |
| 4. Huber, A. P.                               | Anderson, L. W.   |
| 5. Schwenn, M. F.                             | Arendt, J. W.   |
| 6. Rinehart, O.                               | Culbert, H. J.  |
| 7 - 11. <u>Chemical Division</u>              | Dyer, R. H.   |
| Bollinger, E. C.                              | Frazier, R. R.  |
| Clouse, R. J.                                 | Hudson, J. F.   |
| Dykstra, J.                                   | Jones, K. M.  |
| Fleming, T. P.                                | Laycock, J. C.  |
| Varlan, A.                                    | Lieber, L. F.   |
| 12 - 15. <u>Industrial Relations Division</u> | Martin, E. F.   |
| Bahler, K. W.                                 | McCluen, W. D.  |
| Henry, H. F.                                  | Newton, R. L.   |
| Kingsbury, S. A.                              | Parsons, J. A.  |
| Mallett, A. J.                                | Preuss, H. M.   |
| 16, 17. <u>Maintenance Division</u>           | Rice, R. N.   |
| Isenhour, N. L.                               | Senatore, S. J.   |
| Marshall, J. A.                               | Shaffer, R. D.  |
| 18 - 23. <u>Operations Analysis Division</u>  | Sheldon, G. T. E.   |
| de la Garza, A.                               | Shift Superintendent  |
| Garrett, G. A. (5)                            | Snyder, H. G. P.  |
| 24 - 28. <u>Plant Engineering Division</u>    | Stief, S. S.  |
| Batch, R. M.                                  | Strang, F.  |
| Dalton, J. T.                                 | Stubbs, G. E.   |
| Mahoney, J. R.                                | Thompson, B. H.   |
| Ulm, R. W.                                    | Central Files (4)   |
| Zimmerman, B.                                 | 59 - 104. <u>Technical Division</u>                         |
|   | Barton, J. C.   |
|   | Bernhardt, H. A.  |
|   | Evans, E. C.  |
|   | Flynn, A. R.  |
|   | Greene, R. E.   |
|   | Katz, S. (10)   |
|   | Kienberger, C. A.   |
|   | Lafferty, R. H.   |
|   | Lang, D. M.   |
|   | Martin, J. A. (5) ✓   |

Classification changed to: \_\_\_\_\_  
By authority of: \_\_\_\_\_  
ADC or ADD signature (first reviewer) \_\_\_\_\_ Date \_\_\_\_\_  
ADD signature (final reviewer) \_\_\_\_\_ Date \_\_\_\_\_

This document has been approved for release  
by:  
*J. A. Martin* for ASAMST 1/24/96  
ASAMST Officer

Petit, G. S.  
 Preston, C. M.  
 Smith, L. A. (5)  
 Vanstrum, P. R. (10)  
 Wertz, R. J.  
 Wilcox, W. J. (5)

- 105 - 107. USAEC, Washington, D. C.  
 George, D. E.
- 108 - 109. USAEC, Oak Ridge, Tennessee  
 Marshall, E. D.
- 110 - 119. Goodyear Atomic Corporation  
 Wernecke, A. H.
- 120 - 124. Oak Ridge National Laboratory  
 Stringfield, H. F.
- 125 - 134. UCNC, Paducah Plant  
 Fortune, M. B.
- 135 - 144. UCNC, Y-12 Plant  
 Pigott, C. L.

#### F O R E W O R D

Revised uranium conversion factors for theoretically pure compounds have been based on international physical weights of 1956. These factors are intended primarily for the use of the gaseous diffusion plants and users of their production. The presence of uranium isotopes  $^{234}$  and  $^{236}$  is recognized as it currently exists. Further review of conversion factors will be made as needed.

#### A C K N O W L E D G M E N T S

Minor isotope gradients were determined by the laboratories of the Paducah and Oak Ridge Gaseous Diffusion Plants. Calculations were performed by the Process Engineering Division, Oak Ridge Gaseous Diffusion Plant.

Report Number: KP-1674, Revision 1

Title: THEORETICAL WEIGHT  
PERCENT OF URANIUM  
IN URANIUM COMPOUNDS

Edited by: F. H. Anderson  
W. D. McCluen

### BASIS OF CALCULATION

Theoretical uranium conversion factors for pure materials have been recalculated to incorporate the most recently determined physical weights for the uranium isotopes and other elements of concern. (See table 1 for conversion of physical weights to chemical weights.) The basis for re-evaluation is:

1. The theoretical uranium content of a given compound is determined by the following formula:

$$\text{Theoretical Uranium} = \frac{\text{Molecular weight of uranium in compound}}{\text{Molecular weight of compound}}$$

2. The molecular weight of uranium in a compound is computed as follows:

$$(\text{Average atomic weight}) \times (\text{Number of uranium atoms present in the molecule})$$

3. The average atomic weight is computed as follows for uranium of given U-234, U-235, and U-236 concentrations: (See table 1 for conversion of physical weights to chemical weights.)

$$\text{Average atomic weight of uranium} = \frac{100}{\frac{W}{234.050} + \frac{X}{235.053} + \frac{Y}{236.055} + \frac{100-W-X-Y}{238.060}}$$

where W = weight percent U-234  
X = weight percent U-235  
Y = weight percent U-236

4. The molecular weight of a compound is obtained as follows:

$$\text{Molecular weight} = (\text{Average atomic weight of uranium times the number uranium atoms present in the molecule}) + (\text{Molecular weight of compound excluding uranium.})$$

5. Minor isotope values are based on gradients determined in the gaseous diffusion plants at Paducah and Oak Ridge as of July 1, 1958.

TABLE 1  
COMPUTATION OF CHEMICAL WEIGHTS

<u>Element or Isotope</u>	<u>Physical Weight</u> *	<u>Chemical Weight</u>
U-238	238.12522	238.060
U-236	236.11959	236.055
U-235	235.11750	235.053
U-234	234.11408	234.050
O	16.004462	16.0000
F	19.004448	18.9992
Cl	35.46872	35.4590
N	14.011160	14.0073
H	1.008296	1.0080
S	32.07453	32.0657
P	30.98356	30.9750
C	12.014944	12.0116

Physical Weight =  $1.000275^{**}$  Chemical Weight

-----  
\* Trilinear Chart of Nuclides - William H. Sullivan, Oak Ridge National Laboratory - January 1957, as revised.

\*\* Kolthoff and Elving, Treatise on Analytical Chemistry, Part I, Vol. I, Chapter 6 Atomic Weights (Dr. Edward Wichers), p. 163, Interscience Encyclopedia, Inc., New York, 1959.

## TABLE OF CONTENTS

THEORETICAL WEIGHT PERCENT OF URANIUM  
IN URANIUM COMPOUNDS

Theoretical uranium values, from 0.5 to 97.5 percent U-235, are given for the following compounds:

<u>COMPOUND SYMBOL</u>	<u>PAGE NO.</u>
UO <sub>3</sub> .....	6
UF <sub>4</sub> .....	7
U <sub>3</sub> O <sub>8</sub> .....	8
UO <sub>2</sub> .....	9
UF <sub>6</sub> .....	10
UCl <sub>4</sub> .....	11
UCl <sub>3</sub> .....	12
UCl <sub>5</sub> .....	13
UO <sub>2</sub> (NO <sub>3</sub> ) <sub>2</sub> ·6H <sub>2</sub> O .....	14
UF <sub>5</sub> .....	15
UO <sub>2</sub> SO <sub>4</sub> ·3H <sub>2</sub> O .....	16
UO <sub>2</sub> (C <sub>2</sub> H <sub>3</sub> O <sub>2</sub> ) <sub>2</sub> ·2H <sub>2</sub> O .....	17
UO <sub>2</sub> HPO <sub>4</sub> ·4H <sub>2</sub> O .....	18
UO <sub>2</sub> NH <sub>4</sub> PO <sub>4</sub> ·3H <sub>2</sub> O .....	19
UO <sub>2</sub> F <sub>2</sub> .....	20
UO <sub>4</sub> .....	21
U(P <sub>2</sub> O <sub>7</sub> ) .....	22
U <sub>2</sub> O <sub>2</sub> (P <sub>2</sub> O <sub>7</sub> ) .....	23
(NH <sub>4</sub> ) <sub>2</sub> U <sub>2</sub> O <sub>7</sub> .....	24
UO <sub>2</sub> Cl <sub>2</sub> .....	25

## THEORETICAL WEIGHT PER CENT OF URANIUM IN



WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM
		245	83176	490	83132	735	83088
5	83219	250	83176	495	83131	740	83087
10	83218	255	83175	500	83130	745	83086
15	83218	260	83174	505	83130	750	83085
20	83217	265	83173	510	83129	755	83084
25	83216	270	83172	515	83128	760	83083
30	83215	275	83171	520	83127	765	83082
35	83214	280	83170	525	83126	770	83082
40	83213	285	83169	530	83125	775	83081
45	83212	290	83168	535	83124	780	83080
50	83211	295	83167	540	83123	785	83079
55	83210	300	83166	545	83122	790	83078
60	83210	305	83166	550	83122	795	83077
65	83209	310	83165	555	83121	800	83076
70	83208	315	83164	560	83120	805	83075
75	83207	320	83163	565	83119	810	83074
80	83206	325	83162	570	83118	815	83073
85	83205	330	83161	575	83117	820	83072
90	83204	335	83160	580	83116	825	83072
95	83203	340	83159	585	83115	830	83071
100	83202	345	83158	590	83114	835	83070
105	83202	350	83158	595	83113	840	83069
110	83201	355	83157	600	83112	845	83068
115	83200	360	83156	605	83112	850	83067
120	83199	365	83155	610	83111	855	83066
125	83198	370	83154	615	83110	860	83065
130	83197	375	83153	620	83109	865	83064
135	83196	380	83152	625	83108	870	83063
140	83195	385	83151	630	83107	875	83062
145	83194	390	83150	635	83106	880	83061
150	83193	395	83149	640	83105	885	83060
155	83192	400	83148	645	83104	890	83059
160	83192	405	83148	650	83103	895	83058
165	83191	410	83147	655	83102	900	83058
170	83190	415	83146	660	83102	905	83057
175	83189	420	83145	665	83101	910	83056
180	83188	425	83144	670	83100	915	83055
185	83187	430	83143	675	83099	920	83054
190	83186	435	83142	680	83098	925	83053
195	83185	440	83141	685	83097	930	83052
200	83184	445	83140	690	83096	935	83051
205	83184	450	83140	695	83095	940	83050
210	83183	455	83139	700	83094	945	83049
215	83182	460	83138	705	83093	950	83048
220	83181	465	83137	710	83092	955	83047
225	83180	470	83136	715	83092	960	83046
230	83179	475	83135	720	83091	965	83045
235	83178	480	83134	725	83090	970	83044
240	83177	485	83133	730	83089	975	83043

ISOTOPICALLY UNALTERED URANIUM 83219

## THEORETICAL WEIGHT PER CENT OF URANIUM IN



WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM
5	75800	245	75744	490	75686	735	75628
10	75799	250	75743	495	75685	740	75627
15	75798	255	75742	500	75684	745	75625
20	75797	260	75740	505	75682	750	75624
		265	75739	510	75691	755	75623
25	75796	270	75738	515	75680	760	75622
30	75794	275	75737	520	75679	765	75621
35	75793	280	75736	525	75678	770	75619
40	75792	285	75734	530	75677	775	75618
45	75791	290	75733	535	75675	780	75617
50	75790	295	75732	540	75674	785	75616
55	75789	300	75731	545	75673	790	75615
60	75787	305	75730	550	75672	795	75614
65	75786	310	75728	555	75671	800	75612
70	75785	315	75727	560	75670	805	75611
75	75784	320	75726	565	75668	810	75610
80	75783	325	75725	570	75667	815	75609
85	75782	330	75724	575	75666	820	75608
90	75780	335	75723	580	75665	825	75606
95	75779	340	75722	585	75664	830	75605
100	75778	345	75720	590	75662	835	75604
105	75777	350	75719	595	75661	840	75603
110	75776	355	75718	600	75660	845	75601
115	75774	360	75717	605	75659	850	75600
120	75773	365	75716	610	75658	855	75599
125	75772	370	75714	615	75656	860	75598
130	75771	375	75713	620	75655	865	75597
135	75770	380	75712	625	75654	870	75595
140	75769	385	75711	630	75653	875	75594
145	75767	390	75710	635	75652	880	75593
150	75766	395	75708	640	75650	885	75592
155	75765	400	75707	645	75649	890	75590
160	75764	405	75706	650	75648	895	75589
165	75763	410	75705	655	75647	900	75588
170	75762	415	75704	660	75646	905	75587
175	75760	420	75703	665	75644	910	75586
180	75759	425	75701	670	75643	915	75584
185	75758	430	75700	675	75642	920	75583
190	75757	435	75699	680	75641	925	75582
195	75756	440	75698	685	75640	930	75580
200	75754	445	75697	690	75639	935	75579
205	75753	450	75696	695	75637	940	75578
210	75752	455	75694	700	75636	945	75577
215	75751	460	75693	705	75635	950	75575
220	75750	465	75692	710	75634	955	75574
225	75749	470	75691	715	75633	960	75573
230	75747	475	75690	720	75631	965	75572
235	75746	480	75688	725	75630	970	75570
240	75745	485	75687	730	75629	975	75569

ISOTOPICALLY UNALTERED URANIUM 75800

## THEORETICAL WEIGHT PER CENT OF URANIUM IN



WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM
		2 45	8 476 1	4 90	8 472 0	7 35	8 467 9
		2 50	8 476 0	4 95	8 471 9	7 40	8 467 8
		2 55	8 475 9	5 00	8 471 8	7 45	8 467 7
		2 60	8 475 8	5 05	8 471 8	7 50	8 467 7
		2 65	8 475 8	5 10	8 471 7	7 55	8 467 6
		2 70	8 475 7	5 15	8 471 6	7 60	8 467 5
		2 75	8 475 6	5 20	8 471 5	7 65	8 467 4
		2 80	8 475 5	5 25	8 471 4	7 70	8 467 3
		2 85	8 475 4	5 30	8 471 3	7 75	8 467 2
		2 90	8 475 3	5 35	8 471 3	7 80	8 467 2
		2 95	8 475 2	5 40	8 471 2	7 85	8 467 1
		3 00	8 475 2	5 45	8 471 1	7 90	8 467 0
		3 05	8 475 1	5 50	8 471 0	7 95	8 466 9
		3 10	8 475 0	5 55	8 470 9	8 00	8 466 8
		3 15	8 474 9	5 60	8 470 8	8 05	8 466 7
		3 20	8 474 8	5 65	8 470 8	8 10	8 466 6
		3 25	8 474 8	5 70	8 470 7	8 15	8 466 6
		3 30	8 474 7	5 75	8 470 6	8 20	8 466 5
		3 35	8 474 6	5 80	8 470 5	8 25	8 466 4
		3 40	8 474 5	5 85	8 470 4	8 30	8 466 3
		3 45	8 474 4	5 90	8 470 3	8 35	8 466 2
		3 50	8 474 3	5 95	8 470 3	8 40	8 466 1
		3 55	8 474 2	6 00	8 470 2	8 45	8 466 1
		3 60	8 474 2	6 05	8 470 1	8 50	8 466 0
		3 65	8 474 1	6 10	8 470 0	8 55	8 465 9
		3 70	8 474 0	6 15	8 469 9	8 60	8 465 8
		3 75	8 473 9	6 20	8 469 8	8 65	8 465 7
		3 80	8 473 8	6 25	8 469 8	8 70	8 465 6
		3 85	8 473 8	6 30	8 469 7	8 75	8 465 5
		3 90	8 473 7	6 35	8 469 6	8 80	8 465 5
		3 95	8 473 6	6 40	8 469 5	8 85	8 465 4
		4 00	8 473 5	6 45	8 469 4	8 90	8 465 3
		4 05	8 473 4	6 50	8 469 3	8 95	8 465 2
		4 10	8 473 3	6 55	8 469 3	9 00	8 465 1
		4 15	8 473 3	6 60	8 469 2	9 05	8 465 0
		4 20	8 473 2	6 65	8 469 1	9 10	8 464 9
		4 25	8 473 1	6 70	8 469 0	9 15	8 464 8
		4 30	8 473 0	6 75	8 468 9	9 20	8 464 8
		4 35	8 472 9	6 80	8 468 8	9 25	8 464 7
		4 40	8 472 8	6 85	8 468 8	9 30	8 464 6
		4 45	8 472 8	6 90	8 468 7	9 35	8 464 5
		4 50	8 472 7	6 95	8 468 6	9 40	8 464 4
		4 55	8 472 6	7 00	8 468 5	9 45	8 464 3
		4 60	8 472 5	7 05	8 468 4	9 50	8 464 2
		4 65	8 472 4	7 10	8 468 3	9 55	8 464 1
		4 70	8 472 3	7 15	8 468 2	9 60	8 464 0
		4 75	8 472 3	7 20	8 468 2	9 65	8 464 0
		4 80	8 472 2	7 25	8 468 1	9 70	8 463 9
		4 85	8 472 1	7 30	8 468 0	9 75	8 463 8

ISOTOPICALLY UNALTERED URANIUM 84800

## THEORETICAL WEIGHT PER CENT OF URANIUM IN

UO<sub>2</sub>

WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM						
		245	88118	490	88085	735	88052
5	88150	250	88117	495	88084	740	88051
10	88149	255	88117	500	88084	745	88050
15	88149	260	88116	505	88083	750	88050
20	88148	265	88115	510	88082	755	88049
25	88147	270	88114	515	88082	760	88048
30	88147	275	88114	520	88081	765	88048
35	88146	280	88113	525	88080	770	88047
40	88145	285	88112	530	88080	775	88046
45	88145	290	88112	535	88079	780	88046
50	88144	295	88111	540	88078	785	88045
55	88143	300	88110	545	88078	790	88044
60	88143	305	88110	550	88077	795	88044
65	88142	310	88109	555	88076	800	88043
70	88141	315	88108	560	88076	805	88042
75	88141	320	88108	565	88075	810	88042
80	88140	325	88107	570	88074	815	88041
85	88139	330	88106	575	88073	820	88040
90	88139	335	88106	580	88073	825	88039
95	88138	340	88105	585	88072	830	88039
100	88137	345	88104	590	88071	835	88038
105	88137	350	88104	595	88071	840	88037
110	88136	355	88103	600	88070	845	88037
115	88135	360	88102	605	88069	850	88036
120	88135	365	88102	610	88069	855	88035
125	88134	370	88101	615	88068	860	88035
130	88133	375	88100	620	88067	865	88034
135	88133	380	88100	625	88067	870	88033
140	88132	385	88099	630	88066	875	88032
145	88131	390	88098	635	88065	880	88032
150	88131	395	88098	640	88065	885	88031
155	88130	400	88097	645	88064	890	88030
160	88129	405	88096	650	88063	895	88030
165	88129	410	88096	655	88063	900	88029
170	88128	415	88095	660	88062	905	88028
175	88127	420	88094	665	88061	910	88028
180	88127	425	88094	670	88061	915	88027
185	88126	430	88093	675	88060	920	88026
190	88125	435	88092	680	88059	925	88025
195	88125	440	88092	685	88058	930	88025
200	88124	445	88091	690	88058	935	88024
205	88123	450	88090	695	88057	940	88023
210	88123	455	88090	700	88056	945	88022
215	88122	460	88089	705	88056	950	88022
220	88121	465	88088	710	88055	955	88021
225	88121	470	88088	715	88054	960	88020
230	88120	475	88087	720	88054	965	88020
235	88119	480	88086	725	88053	970	88019
240	88119	485	88086	730	88052	975	88018

ISOTOPICALLY UNALTERED URANIUM 88150

## THEORETICAL WEIGHT PER CENT OF URANIUM IN

UF<sub>6</sub>

WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM						
		2 45	67 551	4 90	67 482	7 35	67 413
5	67 619	2 50	67 550	4 95	67 481	7 40	67 411
10	67 617	2 55	67 548	5 00	67 479	7 45	67 410
15	67 616	2 60	67 547	5 05	67 478	7 50	67 408
20	67 614	2 65	67 546	5 10	67 477	7 55	67 407
		2 70	67 544	5 15	67 475	7 60	67 406
25	67 613	2 75	67 543	5 20	67 474	7 65	67 404
30	67 612	2 80	67 541	5 25	67 472	7 70	67 403
35	67 610	2 85	67 540	5 30	67 471	7 75	67 401
40	67 609	2 90	67 539	5 35	67 470	7 80	67 400
45	67 607						
50	67 606	2 95	67 537	5 40	67 468	7 85	67 399
55	67 605	3 00	67 536	5 45	67 467	7 90	67 397
60	67 603	3 05	67 534	5 50	67 465	7 95	67 396
65	67 602	3 10	67 533	5 55	67 464	8 00	67 394
70	67 600	3 15	67 532	5 60	67 462	8 05	67 393
		3 20	67 530	5 65	67 461	8 10	67 391
75	67 599	3 25	67 529	5 70	67 460	8 15	67 390
80	67 598	3 30	67 527	5 75	67 458	8 20	67 389
85	67 596	3 35	67 526	5 80	67 457	8 25	67 387
90	67 595	3 40	67 524	5 85	67 455	8 30	67 386
95	67 593						
100	67 592	3 45	67 523	5 90	67 454	8 35	67 384
105	67 591	3 50	67 522	5 95	67 453	8 40	67 383
110	67 589	3 55	67 520	6 00	67 451	8 45	67 381
115	67 588	3 60	67 519	6 05	67 450	8 50	67 380
120	67 586	3 65	67 517	6 10	67 448	8 55	67 378
		3 70	67 516	6 15	67 447	8 60	67 377
125	67 585	3 75	67 515	6 20	67 446	8 65	67 376
130	67 584	3 80	67 513	6 25	67 444	8 70	67 374
135	67 582	3 85	67 512	6 30	67 443	8 75	67 373
140	67 581	3 90	67 510	6 35	67 441	8 80	67 371
145	67 579						
150	67 578	3 95	67 509	6 40	67 440	8 85	67 370
155	67 576	4 00	67 508	6 45	67 438	8 90	67 368
160	67 575	4 05	67 506	6 50	67 437	8 95	67 367
165	67 574	4 10	67 505	6 55	67 436	9 00	67 365
170	67 572	4 15	67 503	6 60	67 434	9 05	67 364
		4 20	67 502	6 65	67 433	9 10	67 362
175	67 571	4 25	67 501	6 70	67 431	9 15	67 361
180	67 570	4 30	67 499	6 75	67 430	9 20	67 359
185	67 568	4 35	67 498	6 80	67 428	9 25	67 358
190	67 567	4 40	67 496	6 85	67 427	9 30	67 356
195	67 565						
200	67 564	4 45	67 495	6 90	67 426	9 35	67 355
205	67 562	4 50	67 494	6 95	67 424	9 40	67 353
210	67 561	4 55	67 492	7 00	67 423	9 45	67 352
215	67 560	4 60	67 491	7 05	67 421	9 50	67 350
220	67 558	4 65	67 489	7 10	67 420	9 55	67 349
		4 70	67 488	7 15	67 418	9 60	67 347
225	67 557	4 75	67 486	7 20	67 417	9 65	67 346
230	67 556	4 80	67 485	7 25	67 416	9 70	67 344
235	67 554	4 85	67 484	7 30	67 414	9 75	67 343
240	67 553						

ISOTOPICALLY UNALTERED URANIUM 67618

## THEORETICAL WEIGHT PER CENT OF URANIUM IN

UCl<sub>4</sub>

WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM
5	622663	245	62591	490	62517	735	62443
10	622662	250	62590	495	62516	740	62442
15	622660	255	62588	500	62514	745	62440
20	622658	260	62586	505	62513	750	62439
		265	62585	510	62511	755	62437
25	622657	270	62584	515	62510	760	62436
30	622656	275	62582	520	62508	765	62434
35	622654	280	62580	525	62507	770	62432
40	622652	285	62579	530	62505	775	62431
45	622651	290	62577	535	62504	780	62430
50	622650	295	62576	540	62502	785	62428
55	622648	300	62574	545	62501	790	62426
60	622646	305	62573	550	62499	795	62425
65	622645	310	62571	555	62498	800	62423
70	622644	315	62570	560	62496	805	62422
75	622642	320	62568	565	62495	810	62420
80	622640	325	62567	570	62493	815	62419
85	622639	330	62565	575	62492	820	62417
90	622638	335	62564	580	62490	825	62416
95	622636	340	62562	585	62489	830	62414
100	622634	345	62561	590	62487	835	62413
105	622633	350	62559	595	62486	840	62411
110	622632	355	62558	600	62484	845	62410
115	622630	360	62556	605	62483	850	62408
120	622628	365	62555	610	62481	855	62406
125	622627	370	62553	615	62480	860	62405
130	622626	375	62552	620	62478	865	62404
135	622624	380	62550	625	62477	870	62402
140	622622	385	62549	630	62475	875	62400
145	622621	390	62547	635	62474	880	62399
150	622620	395	62546	640	62472	885	62397
155	622618	400	62544	645	62470	890	62396
160	622616	405	62543	650	62469	895	62394
165	622615	410	62541	655	62468	900	62392
170	622614	415	62540	660	62466	905	62391
175	622612	420	62538	665	62464	910	62389
180	622610	425	62537	670	62463	915	62388
185	622609	430	62535	675	62461	920	62386
190	622608	435	62534	680	62460	925	62384
195	622606	440	62532	685	62458	930	62383
200	622604	445	62531	690	62457	935	62381
205	622603	450	62529	695	62455	940	62380
210	622602	455	62528	700	62454	945	62378
215	622600	460	62526	705	62452	950	62376
220	622598	465	62525	710	62451	955	62375
225	622597	470	62523	715	62449	960	62373
230	622596	475	62522	720	62448	965	62372
235	622594	480	62520	725	62446	970	62370
240	622592	485	62519	730	62445	975	62368

ISOTOPICALLY UNALTERED URANIUM 62662

## THEORETICAL WEIGHT PER CENT OF URANIUM IN



WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM						
		245	69049	490	68981	735	68914
		250	69047	495	68980	740	68912
5	69114	255	69046	500	68978	745	68911
10	69113	260	69044	505	68977	750	68909
15	69112	265	69043	510	68976	755	68908
20	69110						
		270	69042	515	68974	760	68907
25	69109	275	69040	520	68973	765	68905
30	69107	280	69039	525	68972	770	68904
35	69106	285	69038	530	68970	775	68902
40	69105	290	69036	535	68969	780	68901
45	69103						
		295	69035	540	68968	785	68900
50	69102	300	69034	545	68966	790	68898
55	69101	305	69032	550	68965	795	68897
60	69099	310	69031	555	68963	800	68896
65	69098	315	69029	560	68962	805	68894
70	69096						
		320	69028	565	68961	810	68893
75	69095	325	69027	570	68959	815	68891
80	69094	330	69025	575	68958	820	68890
85	69092	335	69024	580	68956	825	68889
90	69091	340	69022	585	68955	830	68887
95	69090						
		345	69021	590	68954	835	68886
100	69088	350	69020	595	68952	840	68884
105	69087	355	69018	600	68951	845	68883
110	69086	360	69017	605	68950	850	68882
115	69084	365	69016	610	68948	855	68880
120	69083						
		370	69014	615	68947	860	68879
125	69082	375	69013	620	68946	865	68877
130	69080	380	69012	625	68944	870	68876
135	69079	385	69010	630	68943	875	68874
140	69077	390	69009	635	68941	880	68873
145	69076						
		395	69007	640	68940	885	68872
150	69075	400	69006	645	68939	890	68870
155	69073	405	69005	650	68937	895	68869
160	69072	410	69003	655	68936	900	68867
165	69070	415	69002	660	68934	905	68866
170	69069						
		420	69000	665	68933	910	68864
175	69068	425	68999	670	68932	915	68863
180	69066	430	68998	675	68930	920	68861
185	69065	435	68996	680	68929	925	68860
190	69064	440	68995	685	68928	930	69858
195	69062						
		445	68994	690	68926	935	68857
200	69061	450	68992	695	68925	940	68856
205	69060	455	68991	700	68923	945	68854
210	69058	460	68990	705	68922	950	68853
215	69057	465	68988	710	68920	955	68851
220	69055						
		470	68987	715	68919	960	68850
225	69054	475	68985	720	68918	965	68848
230	69053	480	68984	725	68916	970	68847
235	69051	485	68083	730	68915	975	68845
240	69050						

ISOTOPICALLY UNALTERED URANIUM 69114

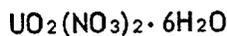
## THEORETICAL WEIGHT PER CENT OF URANIUM IN

UCl<sub>5</sub>

WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM
5	57313	245	57238	490	57161	735	57084
10	57312	250	57236	495	57159	740	57082
15	57310	255	57235	500	57158	745	57080
20	57308	260	57233	505	57156	750	57079
		265	57232	510	57155	755	57077
25	57307	270	57230	515	57153	760	57076
30	57305	275	57228	520	57152	765	57074
35	57304	280	57227	525	57150	770	57072
40	57302	285	57225	530	57148	775	57071
45	57301	290	57224	535	57147	780	57069
50	57299	295	57222	540	57145	785	57068
55	57298	300	57221	545	57144	790	57066
60	57296	305	57219	550	57142	795	57064
65	57294	310	57218	555	57140	800	57063
70	57293	315	57216	560	57139	805	57061
75	57291	320	57214	565	57137	810	57060
80	57290	325	57213	570	57136	815	57058
85	57288	330	57211	575	57134	820	57056
90	57287	335	57210	580	57133	825	57055
95	57285	340	57208	585	57131	830	57053
100	57283	345	57206	590	57129	835	57052
105	57282	350	57205	595	57128	840	57050
110	57280	355	57203	600	57126	845	57048
115	57279	360	57202	605	57125	850	57047
120	57277	365	57200	610	57123	855	57045
125	57276	370	57199	615	57122	860	57044
130	57274	375	57197	620	57120	865	57042
135	57272	380	57196	625	57118	870	57040
140	57271	385	57194	630	57117	875	57039
145	57269	390	57192	635	57115	880	57037
150	57268	395	57191	640	57114	885	57036
155	57266	400	57189	645	57112	890	57034
160	57265	405	57188	650	57110	895	57032
165	57263	410	57186	655	57109	900	57031
170	57262	415	57184	660	57107	905	57029
175	57260	420	57183	665	57106	910	57027
180	57258	425	57181	670	57104	915	57026
185	57257	430	57180	675	57102	920	57024
190	57255	435	57178	680	57101	925	57022
195	57254	440	57177	685	57099	930	57020
200	57252	445	57175	690	57098	935	57019
205	57250	450	57174	695	57096	940	57017
210	57249	455	57172	700	57095	945	57016
215	57247	460	57170	705	57093	950	57014
220	57246	465	57169	710	57091	955	57012
225	57244	470	57167	715	57090	960	57010
230	57243	475	57166	720	57088	965	57009
235	57241	480	57164	725	57087	970	57007
240	57240	485	57162	730	57085	975	57005

ISOTOPICALLY UNALTERED URANIUM 57313

## THEORETICAL WEIGHT PER CENT OF URANIUM IN



WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM						
		245	47328	490	47249	735	47171
5	47405	250	47326	495	47248	740	47169
10	47403	255	47325	500	47246	745	47167
15	47401	260	47323	505	47245	750	47166
20	47400	265	47322	510	47243	755	47164
25	47398	270	47320	515	47241	760	47163
30	47397	275	47318	520	47240	765	47161
35	47395	280	47317	525	47238	770	47159
40	47393	285	47315	530	47237	775	47158
45	47392	290	47314	535	47235	780	47156
50	47390	295	47312	540	47233	785	47154
55	47389	300	47310	545	47232	790	47153
60	47387	305	47309	550	47230	795	47151
65	47385	310	47307	555	47229	800	47150
70	47384	315	47306	560	47227	805	47148
75	47382	320	47304	565	47225	810	47146
80	47381	325	47302	570	47224	815	47145
85	47379	330	47301	575	47222	820	47143
90	47377	335	47299	580	47221	825	47142
95	47376	340	47297	585	47219	830	47140
100	47374	345	47296	590	47217	835	47138
105	47373	350	47294	595	47216	840	47137
110	47371	355	47293	600	47214	845	47135
115	47369	360	47291	605	47213	850	47133
120	47368	365	47289	610	47211	855	47132
125	47366	370	47288	615	47209	860	47130
130	47365	375	47286	620	47208	865	47128
135	47363	380	47285	625	47206	870	47127
140	47362	385	47283	630	47204	875	47125
145	47360	390	47281	635	47203	880	47124
150	47358	395	47280	640	47201	885	47122
155	47357	400	47278	645	47200	890	47120
160	47355	405	47277	650	47198	895	47118
165	47354	410	47275	655	47196	900	47117
170	47352	415	47274	660	47195	905	47115
175	47350	420	47272	665	47193	910	47114
180	47349	425	47270	670	47192	915	47112
185	47347	430	47269	675	47190	920	47110
190	47346	435	47267	680	47188	925	47108
195	47344	440	47266	685	47187	930	47107
200	47342	445	47264	690	47185	935	47105
205	47341	450	47262	695	47184	940	47103
210	47339	455	47261	700	47182	945	47102
215	47338	460	47259	705	47180	950	47100
220	47336	465	47257	710	47179	955	47098
225	47334	470	47256	715	47177	960	47096
230	47333	475	47254	720	47176	965	47095
235	47331	480	47253	725	47174	970	47093
240	47330	485	47251	730	47172	975	47091

ISOTOPICALLY UNALTERED URANIUM 47404

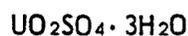
## THEORETICAL WEIGHT PER CENT OF URANIUM IN

UF<sub>5</sub>

WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM						
5	71476	245	71413	490	71349	735	71284
10	71475	250	71412	495	71348	740	71283
15	71474	255	71411	500	71346	745	71282
20	71472	260	71409	505	71345	750	71280
		265	71408	510	71344	755	71279
25	71471	270	71407				
30	71470	275	71406	515	71342	760	71278
35	71468	280	71404	520	71341	765	71276
40	71467	285	71403	525	71340	770	71275
45	71466	290	71402	530	71339	775	71274
				535	71337	780	71272
50	71464	295	71400				
55	71463	300	71399	540	71336	785	71271
60	71462	305	71398	545	71335	790	71270
65	71460	310	71396	550	71333	795	71268
70	71459	315	71395	555	71332	800	71267
				560	71331	805	71266
75	71458	320	71394				
80	71456	325	71392	565	71329	810	71264
85	71455	330	71391	570	71328	815	71263
90	71454	335	71390	575	71327	820	71262
95	71453	340	71388	580	71325	825	71260
				585	71324	830	71259
100	71451	345	71387				
105	71450	350	71386	590	71323	835	71258
110	71449	355	71384	595	71322	840	71256
115	71447	360	71383	600	71320	845	71255
120	71446	365	71382	605	71319	850	71254
				610	71318	855	71252
125	71445	370	71381				
130	71444	375	71379	615	71316	860	71251
135	71442	380	71378	620	71315	865	71250
140	71441	385	71377	625	71314	870	71248
145	71440	390	71375	630	71312	875	71247
				635	71311	880	71246
150	71438	395	71374				
155	71437	400	71373	640	71310	885	71244
160	71436	405	71371	645	71308	890	71243
165	71434	410	71370	650	71307	895	71242
170	71433	415	71369	655	71306	900	71240
				660	71304	905	71239
175	71432	420	71368				
180	71430	425	71366	665	71303	910	71238
185	71429	430	71365	670	71302	915	71236
190	71428	435	71364	675	71300	920	71234
195	71426	440	71362	680	71299	925	71233
				685	71298	930	71232
200	71425	445	71361				
205	71424	450	71360	690	71296	935	71230
210	71422	455	71358	695	71295	940	71229
215	71421	460	71357	700	71294	945	71228
220	71420	465	71356	705	71292	950	71226
				710	71291	955	71225
225	71419	470	71354				
230	71417	475	71353	715	71290	960	71223
235	71416	480	71352	720	71288	965	71222
240	71415	485	71350	725	71287	970	71220
				730	71286	975	71219

ISOTOPICALLY UNALTERED URANIUM 71476

## THEORETICAL WEIGHT PER CENT OF URANIUM IN



WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM
5	56656	245	56580	490	56503	735	56425
10	56654	250	56579	495	56502	740	56424
15	56653	255	56577	500	56500	745	56422
20	56651	260	56576	505	56498	750	56420
		265	56574	510	56497	755	56419
25	56650	270	56572	515	56495	760	56417
30	56648	275	56571	520	56494	765	56416
35	56646	280	56569	525	56492	770	56414
40	56645	285	56568	530	56490	775	56413
45	56643	290	56566	535	56489	780	56411
50	56642	295	56565	540	56487	785	56409
55	56640	300	56563	545	56486	790	56408
60	56639	305	56561	550	56484	795	56406
65	56637	310	56560	555	56482	800	56405
70	56635	315	56558	560	56481	805	56403
75	56634	320	56557	565	56479	810	56401
80	56632	325	56555	570	56478	815	56400
85	56631	330	56554	575	56476	820	56398
90	56629	335	56552	580	56475	825	56397
95	56628	340	56550	585	56473	830	56395
100	56626	345	56549	590	56471	835	56393
105	56624	350	56547	595	56470	840	56392
110	56623	355	56546	600	56468	845	56390
115	56621	360	56544	605	56467	850	56389
120	56620	365	56542	610	56465	855	56387
125	56618	370	56541	615	56464	860	56385
130	56617	375	56539	620	56462	865	56384
135	56615	380	56538	625	56460	870	56382
140	56613	385	56536	630	56459	875	56380
145	56612	390	56535	635	56457	880	56379
150	56610	395	56533	640	56456	885	56377
155	56609	400	56531	645	56454	890	56376
160	56607	405	56530	650	56452	895	56374
165	56606	410	56528	655	56451	900	56372
170	56604	415	56527	660	56449	905	56371
175	56602	420	56525	665	56448	910	56369
180	56601	425	56524	670	56446	915	56367
185	56599	430	56522	675	56444	920	56365
190	56598	435	56520	680	56443	925	56364
195	56596	440	56519	685	56441	930	56362
200	56594	445	56517	690	56440	935	56360
205	56593	450	56516	695	56438	940	56359
210	56591	455	56514	700	56436	945	56357
215	56590	460	56512	705	56435	950	56355
220	56588	465	56511	710	56433	955	56354
225	56587	470	56509	715	56432	960	56352
230	56585	475	56508	720	56430	965	56350
235	56584	480	56506	725	56428	970	56349
240	56582	485	56505	730	56427	975	56347

ISOTOPICALLY UNALTERED URANIUM 56655

## THEORETICAL WEIGHT PER CENT OF URANIUM IN



WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM						
5	561120	245	56044	490	55967	735	55889
10	561118	250	56043	495	55965	740	55887
15	561117	255	56041	500	55964	745	55886
20	561115	260	56039	505	55962	750	55884
		265	56038	510	55960	755	55882
25	561114	270	56036	515	55959	760	55881
30	561112	275	56035	520	55957	765	55879
35	561110	280	56033	525	55956	770	55878
40	561109	285	56032	530	55954	775	55876
45	561107	290	56030	535	55952	780	55874
50	561106	295	56028	540	55951	785	55873
55	561104	300	56027	545	55949	790	55871
60	561103	305	56025	550	55948	795	55870
65	561101	310	56024	555	55946	800	55868
70	561099	315	56022	560	55944	805	55866
75	561098	320	56020	565	55943	810	55865
80	561096	325	56019	570	55941	815	55863
85	561095	330	56017	575	55940	820	55862
90	561093	335	56016	580	55938	825	55860
95	561092	340	56014	585	55936	830	55858
100	561090	345	56012	590	55935	835	55857
105	561088	350	56011	595	55933	840	55855
110	561087	355	56009	600	55932	845	55854
115	561085	360	56008	605	55930	850	55852
120	561084	365	56006	610	55929	855	55850
125	561082	370	56005	615	55927	860	55849
130	561080	375	56003	620	55925	865	55847
135	561079	380	56001	625	55924	870	55845
140	561077	385	56000	630	55922	875	55844
145	561076	390	55998	635	55921	880	55842
150	561074	395	55997	640	55919	885	55840
155	561073	400	55995	645	55918	890	55839
160	561071	405	55994	650	55916	895	55837
165	561070	410	55992	655	55914	900	55836
170	561068	415	55990	660	55913	905	55834
175	561066	420	55989	665	55911	910	55832
180	561065	425	55987	670	55910	915	55830
185	561063	430	55986	675	55908	920	55829
190	561062	435	55984	680	55906	925	55827
195	561060	440	55982	685	55905	930	55825
200	561058	445	55981	690	55903	935	55824
205	561057	450	55979	695	55902	940	55822
210	561055	455	55978	700	55900	945	55820
215	561054	460	55976	705	55898	950	55819
220	561052	465	55975	710	55897	955	55817
225	561050	470	55973	715	55895	960	55815
230	561049	475	55971	720	55894	965	55814
235	561047	480	55970	725	55892	970	55812
240	561046	485	55968	730	55890	975	55810

ISOTOPICALLY UNALTERED URANIUM 56119

THEORETICAL WEIGHT PER CENT OF URANIUM IN



WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM
		245	54260	490	54182	735	54104
5	54337	250	54259	495	54181	740	54102
10	54335	255	54257	500	54179	745	54100
15	54334	260	54256	505	54178	750	54099
20	54332	265	54254	510	54176	755	54097
25	54330	270	54252	515	54174	760	54096
30	54329	275	54251	520	54173	765	54094
35	54327	280	54249	525	54171	770	54092
40	54326	285	54248	530	54170	775	54091
45	54324	290	54246	535	54168	780	54089
50	54322	295	54244	540	54166	785	54088
55	54321	300	54243	545	54165	790	54086
60	54319	305	54241	550	54163	795	54084
65	54318	310	54240	555	54162	800	54083
70	54316	315	54238	560	54160	805	54081
75	54314	320	54236	565	54158	810	54080
80	54313	325	54235	570	54157	815	54078
85	54311	330	54233	575	54155	820	54076
90	54310	335	54232	580	54154	825	54075
95	54308	340	54230	585	54152	830	54073
100	54306	345	54228	590	54150	835	54072
105	54305	350	54227	595	54149	840	54070
110	54303	355	54225	600	54147	845	54068
115	54302	360	54224	605	54146	850	54067
120	54300	365	54222	610	54144	855	54065
125	54299	370	54220	615	54142	860	54063
130	54297	375	54219	620	54141	865	54062
135	54295	380	54217	625	54139	870	54060
140	54294	385	54216	630	54138	875	54058
145	54292	390	54214	635	54136	880	54057
150	54291	395	54212	640	54134	885	54055
155	54289	400	54211	645	54133	890	54054
160	54287	405	54209	650	54131	895	54052
165	54286	410	54208	655	54130	900	54050
170	54284	415	54206	660	54128	905	54048
175	54283	420	54205	665	54126	910	54047
180	54281	425	54203	670	54125	915	54045
185	54280	430	54201	675	54123	920	54043
190	54278	435	54200	680	54122	925	54042
195	54276	440	54198	685	54120	930	54040
200	54275	445	54197	690	54118	935	54038
205	54273	450	54195	695	54117	940	54037
210	54272	455	54193	700	54115	945	54035
215	54270	460	54192	705	54113	950	54033
220	54268	465	54190	710	54112	955	54032
225	54267	470	54189	715	54110	960	54030
230	54265	475	54187	720	54109	965	54028
235	54264	480	54186	725	54107	970	54026
240	54262	485	54184	730	54105	975	54024

ISOTOPICALLY UNALTERED URANIUM 54336

## THEORETICAL WEIGHT PER CENT OF URANIUM IN



WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM						
5	544459	245	54383	490	54305	735	54226
10	544458	250	54381	495	54303	740	54225
15	544456	255	54380	500	54302	745	54223
20	544454	260	54378	505	54300	750	54221
		265	54376	510	54298	755	54220
25	544453	270	54375	515	54297	760	54218
30	544451	275	54373	520	54295	765	54217
35	544450	280	54372	525	54294	770	54215
40	544448	285	54370	530	54292	775	54213
45	544446	290	54368	535	54290	780	54212
50	544445	295	54367	540	54289	785	54210
55	544443	300	54365	545	54287	790	54209
60	544442	305	54364	550	54286	795	54207
65	544440	310	54362	555	54284	800	54205
70	544438	315	54360	560	54282	805	54204
75	544437	320	54359	565	54281	810	54202
80	544435	325	54357	570	54279	815	54200
85	544434	330	54356	575	54278	820	54199
90	544432	335	54354	580	54276	825	54197
95	544430	340	54352	585	54274	830	54196
100	544429	345	54351	590	54273	835	54194
105	544427	350	54349	595	54271	840	54192
110	544426	355	54348	600	54270	845	54191
115	544424	360	54346	605	54268	850	54189
120	544423	365	54345	610	54266	855	54188
125	544421	370	54343	615	54265	860	54186
130	544419	375	54341	620	54263	865	54184
135	544418	380	54340	625	54262	870	54183
140	544416	385	54338	630	54260	875	54181
145	544415	390	54337	635	54258	880	54179
150	544413	395	54335	640	54257	885	54178
155	544411	400	54333	645	54255	890	54176
160	544410	405	54332	650	54254	895	54174
165	544408	410	54330	655	54252	900	54173
170	544407	415	54329	660	54250	905	54171
175	544405	420	54327	665	54249	910	54169
180	544404	425	54325	670	54247	915	54168
185	544402	430	54324	675	54246	920	54166
190	544400	435	54322	680	54244	925	54164
195	54399	440	54321	685	54242	930	54162
200	54397	445	54319	690	54241	935	54161
205	54396	450	54318	695	54239	940	54159
210	54394	455	54316	700	54238	945	54157
215	54392	460	54314	705	54236	950	54156
220	54391	465	54313	710	54234	955	54154
225	54389	470	54311	715	54233	960	54152
230	54388	475	54310	720	54231	965	54151
235	54386	480	54308	725	54230	970	54149
240	54384	485	54306	730	54228	975	54147

ISOTOPICALLY UNALTERED URANIUM 54458

## THEORETICAL WEIGHT PER CENT OF URANIUM IN



WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM
		2 45	7 7 2 2 2	4 9 0	7 7 1 6 7	7 3 5	7 7 1 1 1
5	7 7 2 7 6	2 5 0	7 7 2 2 1	4 9 5	7 7 1 6 6	7 4 0	7 7 1 1 0
1 0	7 7 2 7 5	2 5 5	7 7 2 2 0	5 0 0	7 7 1 6 5	7 4 5	7 7 1 0 9
1 5	7 7 2 7 4	2 6 0	7 7 2 1 9	5 0 5	7 7 1 6 4	7 5 0	7 7 1 0 8
2 0	7 7 2 7 3	2 6 5	7 7 2 1 8	5 1 0	7 7 1 6 2	7 5 5	7 7 1 0 7
2 5	7 7 2 7 2	2 7 0	7 7 2 1 7	5 1 5	7 7 1 6 1	7 6 0	7 7 1 0 5
3 0	7 7 2 7 1	2 7 5	7 7 2 1 6	5 2 0	7 7 1 6 0	7 6 5	7 7 1 0 4
3 5	7 7 2 7 0	2 8 0	7 7 2 1 4	5 2 5	7 7 1 5 9	7 7 0	7 7 1 0 3
4 0	7 7 2 6 8	2 8 5	7 7 2 1 3	5 3 0	7 7 1 5 8	7 7 5	7 7 1 0 2
4 5	7 7 2 6 7	2 9 0	7 7 2 1 2	5 3 5	7 7 1 5 7	7 8 0	7 7 1 0 1
5 0	7 7 2 6 6	2 9 5	7 7 2 1 1	5 4 0	7 7 1 5 6	7 8 5	7 7 1 0 0
5 5	7 7 2 6 5	3 0 0	7 7 2 1 0	5 4 5	7 7 1 5 4	7 9 0	7 7 0 9 9
6 0	7 7 2 6 4	3 0 5	7 7 2 0 9	5 5 0	7 7 1 5 3	7 9 5	7 7 0 9 7
6 5	7 7 2 6 3	3 1 0	7 7 2 0 8	5 5 5	7 7 1 5 2	8 0 0	7 7 0 9 6
7 0	7 7 2 6 2	3 1 5	7 7 2 0 6	5 6 0	7 7 1 5 1	8 0 5	7 7 0 9 5
7 5	7 7 2 6 1	3 2 0	7 7 2 0 5	5 6 5	7 7 1 5 0	8 1 0	7 7 0 9 4
8 0	7 7 2 6 0	3 2 5	7 7 2 0 4	5 7 0	7 7 1 4 9	8 1 5	7 7 0 9 3
8 5	7 7 2 5 8	3 3 0	7 7 2 0 3	5 7 5	7 7 1 4 8	8 2 0	7 7 0 9 2
9 0	7 7 2 5 7	3 3 5	7 7 2 0 2	5 8 0	7 7 1 4 6	8 2 5	7 7 0 9 1
9 5	7 7 2 5 6	3 4 0	7 7 2 0 1	5 8 5	7 7 1 4 5	8 3 0	7 7 0 8 9
1 0 0	7 7 2 5 5	3 4 5	7 7 2 0 0	5 9 0	7 7 1 4 4	8 3 5	7 7 0 8 8
1 0 5	7 7 2 5 4	3 5 0	7 7 1 9 9	5 9 5	7 7 1 4 3	8 4 0	7 7 0 8 7
1 1 0	7 7 2 5 3	3 5 5	7 7 1 9 8	6 0 0	7 7 1 4 2	8 4 5	7 7 0 8 6
1 1 5	7 7 2 5 2	3 6 0	7 7 1 9 6	6 0 5	7 7 1 4 1	8 5 0	7 7 0 8 5
1 2 0	7 7 2 5 0	3 6 5	7 7 1 9 5	6 1 0	7 7 1 4 0	8 5 5	7 7 0 8 4
1 2 5	7 7 2 4 9	3 7 0	7 7 1 9 4	6 1 5	7 7 1 3 9	8 6 0	7 7 0 8 2
1 3 0	7 7 2 4 8	3 7 5	7 7 1 9 3	6 2 0	7 7 1 3 7	8 6 5	7 7 0 8 1
1 3 5	7 7 2 4 7	3 8 0	7 7 1 9 2	6 2 5	7 7 1 3 6	8 7 0	7 7 0 8 0
1 4 0	7 7 2 4 6	3 8 5	7 7 1 9 1	6 3 0	7 7 1 3 5	8 7 5	7 7 0 7 9
1 4 5	7 7 2 4 5	3 9 0	7 7 1 9 0	6 3 5	7 7 1 3 4	8 8 0	7 7 0 7 8
1 5 0	7 7 2 4 4	3 9 5	7 7 1 8 8	6 4 0	7 7 1 3 3	8 8 5	7 7 0 7 7
1 5 5	7 7 2 4 3	4 0 0	7 7 1 8 7	6 4 5	7 7 1 3 2	8 9 0	7 7 0 7 5
1 6 0	7 7 2 4 2	4 0 5	7 7 1 8 6	6 5 0	7 7 1 3 1	8 9 5	7 7 0 7 4
1 6 5	7 7 2 4 0	4 1 0	7 7 1 8 5	6 5 5	7 7 1 3 0	9 0 0	7 7 0 7 3
1 7 0	7 7 2 3 9	4 1 5	7 7 1 8 4	6 6 0	7 7 1 2 8	9 0 5	7 7 0 7 2
1 7 5	7 7 2 3 8	4 2 0	7 7 1 8 3	6 6 5	7 7 1 2 7	9 1 0	7 7 0 7 1
1 8 0	7 7 2 3 7	4 2 5	7 7 1 8 2	6 7 0	7 7 1 2 6	9 1 5	7 7 0 7 0
1 8 5	7 7 2 3 6	4 3 0	7 7 1 8 0	6 7 5	7 7 1 2 5	9 2 0	7 7 0 6 8
1 9 0	7 7 2 3 5	4 3 5	7 7 1 7 9	6 8 0	7 7 1 2 4	9 2 5	7 7 0 6 7
1 9 5	7 7 2 3 4	4 4 0	7 7 1 7 8	6 8 5	7 7 1 2 3	9 3 0	7 7 0 6 6
2 0 0	7 7 2 3 2	4 4 5	7 7 1 7 7	6 9 0	7 7 1 2 2	9 3 5	7 7 0 6 5
2 0 5	7 7 2 3 1	4 5 0	7 7 1 7 6	6 9 5	7 7 1 2 0	9 4 0	7 7 0 6 3
2 1 0	7 7 2 3 0	4 5 5	7 7 1 7 5	7 0 0	7 7 1 1 9	9 4 5	7 7 0 6 2
2 1 5	7 7 2 2 9	4 6 0	7 7 1 7 4	7 0 5	7 7 1 1 8	9 5 0	7 7 0 6 1
2 2 0	7 7 2 2 8	4 6 5	7 7 1 7 3	7 1 0	7 7 1 1 7	9 5 5	7 7 0 6 0
2 2 5	7 7 2 2 7	4 7 0	7 7 1 7 2	7 1 5	7 7 1 1 6	9 6 0	7 7 0 5 8
2 3 0	7 7 2 2 6	4 7 5	7 7 1 7 0	7 2 0	7 7 1 1 5	9 6 5	7 7 0 5 7
2 3 5	7 7 2 2 5	4 8 0	7 7 1 6 9	7 2 5	7 7 1 1 4	9 7 0	7 7 0 5 6
2 4 0	7 7 2 2 4	4 8 5	7 7 1 6 8	7 3 0	7 7 1 1 2	9 7 5	7 7 0 5 5

ISOTOPICALLY UNALTERED URANIUM 77276

## THEORETICAL WEIGHT PER CENT OF URANIUM IN



WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM						
		2 45	78 760	4 90	78 707	7 35	78 654
5	78 811	2 50	78 759	4 95	78 706	7 40	78 653
10	78 810	2 55	78 758	5 00	78 705	7 45	78 652
15	78 809	2 60	78 756	5 05	78 704	7 50	78 651
20	78 808	2 65	78 755	5 10	78 703	7 55	78 650
25	78 807	2 70	78 754	5 15	78 702	7 60	78 648
30	78 806	2 75	78 753	5 20	78 700	7 65	78 647
35	78 805	2 80	78 752	5 25	78 699	7 70	78 646
40	78 804	2 85	78 751	5 30	78 698	7 75	78 645
45	78 802	2 90	78 750	5 35	78 697	7 80	78 644
50	78 801	2 95	78 749	5 40	78 696	7 85	78 643
55	78 800	3 00	78 748	5 45	78 695	7 90	78 642
60	78 799	3 05	78 747	5 50	78 694	7 95	78 641
65	78 798	3 10	78 746	5 55	78 693	8 00	78 640
70	78 797	3 15	78 745	5 60	78 692	8 05	78 639
75	78 796	3 20	78 744	5 65	78 691	8 10	78 638
80	78 795	3 25	78 742	5 70	78 690	8 15	78 636
85	78 794	3 30	78 741	5 75	78 689	8 20	78 635
90	78 793	3 35	78 740	5 80	78 688	8 25	78 634
95	78 792	3 40	78 739	5 85	78 686	8 30	78 633
100	78 791	3 45	78 738	5 90	78 685	8 35	78 632
105	78 790	3 50	78 737	5 95	78 684	8 40	78 631
110	78 789	3 55	78 736	6 00	78 683	8 45	78 630
115	78 788	3 60	78 735	6 05	78 682	8 50	78 629
120	78 786	3 65	78 734	6 10	78 681	8 55	78 628
125	78 785	3 70	78 733	6 15	78 680	8 60	78 627
130	78 784	3 75	78 732	6 20	78 679	8 65	78 626
135	78 783	3 80	78 731	6 25	78 678	8 70	78 624
140	78 782	3 85	78 730	6 30	78 677	8 75	78 623
145	78 781	3 90	78 728	6 35	78 676	8 80	78 622
150	78 780	3 95	78 727	6 40	78 675	8 85	78 621
155	78 779	4 00	78 726	6 45	78 674	8 90	78 620
160	78 778	4 05	78 725	6 50	78 672	8 95	78 619
165	78 777	4 10	78 724	6 55	78 671	9 00	78 618
170	78 776	4 15	78 723	6 60	78 670	9 05	78 616
175	78 775	4 20	78 722	6 65	78 669	9 10	78 615
180	78 774	4 25	78 721	6 70	78 668	9 15	78 614
185	78 772	4 30	78 720	6 75	78 667	9 20	78 613
190	78 771	4 35	78 719	6 80	78 666	9 25	78 612
195	78 770	4 40	78 718	6 85	78 665	9 30	78 611
200	78 769	4 45	78 717	6 90	78 664	9 35	78 610
205	78 768	4 50	78 716	6 95	78 663	9 40	78 608
210	78 767	4 55	78 714	7 00	78 662	9 45	78 607
215	78 766	4 60	78 713	7 05	78 660	9 50	78 606
220	78 765	4 65	78 712	7 10	78 659	9 55	78 605
225	78 764	4 70	78 711	7 15	78 658	9 60	78 604
230	78 763	4 75	78 710	7 20	78 657	9 65	78 603
235	78 762	4 80	78 709	7 25	78 656	9 70	78 602
240	78 761	4 85	78 708	7 30	78 655	9 75	78 600

ISOTOPICALLY UNALTERED URANIUM 78811

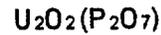
## THEORETICAL WEIGHT PER CENT OF URANIUM IN



WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM						
		245	57704	490	57627	735	57549
5	57778	250	57702	495	57625	740	57548
10	57777	255	57700	500	57624	745	57546
15	57775	260	57699	505	57622	750	57545
20	57774	265	57697	510	57620	755	57543
25	57772	270	57696	515	57619	760	57542
30	57771	275	57694	520	57617	765	57540
35	57769	280	57692	525	57616	770	57538
40	57768	285	57691	530	57614	775	57537
45	57766	290	57689	535	57613	780	57535
50	57764	295	57688	540	57611	785	57534
55	57763	300	57686	545	57609	790	57532
60	57761	305	57685	550	57608	795	57530
65	57760	310	57683	555	57606	800	57529
70	57758	315	57682	560	57605	805	57527
75	57757	320	57680	565	57603	810	57526
80	57755	325	57678	570	57602	815	57524
85	57754	330	57677	575	57600	820	57522
90	57752	335	57675	580	57598	825	57521
95	57750	340	57674	585	57597	830	57519
100	57749	345	57672	590	57595	835	57518
105	57747	350	57671	595	57594	840	57516
110	57746	355	57669	600	57592	845	57514
115	57744	360	57667	605	57590	850	57513
120	57743	365	57666	610	57589	855	57511
125	57741	370	57664	615	57587	860	57510
130	57740	375	57663	620	57586	865	57508
135	57738	380	57661	625	57584	870	57506
140	57736	385	57660	630	57583	875	57505
145	57735	390	57658	635	57581	880	57503
150	57733	395	57656	640	57580	885	57502
155	57732	400	57655	645	57578	890	57500
160	57730	405	57653	650	57576	895	57498
165	57728	410	57652	655	57575	900	57497
170	57727	415	57650	660	57573	905	57495
175	57725	420	57649	665	57572	910	57493
180	57724	425	57647	670	57570	915	57492
185	57722	430	57646	675	57568	920	57490
190	57721	435	57644	680	57567	925	57488
195	57719	440	57642	685	57565	930	57487
200	57718	445	57641	690	57564	935	57485
205	57716	450	57639	695	57562	940	57483
210	57714	455	57638	700	57560	945	57482
215	57713	460	57636	705	57559	950	57480
220	57711	465	57634	710	57557	955	57478
225	57710	470	57633	715	57556	960	57477
230	57708	475	57631	720	57554	965	57475
235	57707	480	57630	725	57553	970	57473
240	57705	485	57628	730	57551	975	57472

ISOTOPICALLY UNALTERED URANIUM 57778

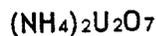
## THEORETICAL WEIGHT PER CENT OF URANIUM IN



WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM						
5	69804	245	69739	490	69672	735	69606
10	69802	250	69738	495	69671	740	69604
15	69801	255	69736	500	69670	745	69603
20	69800	260	69735	505	69668	750	69602
		265	69734	510	69667	755	69600
25	69798	270	69732	515	69666	760	69599
30	69797	275	69731	520	69664	765	69597
35	69796	280	69729	525	69663	770	69596
40	69794	285	69728	530	69662	775	69595
45	69793	290	69727	535	69660	780	69593
50	69792	295	69725	540	69659	785	69592
55	69790	300	69724	545	69658	790	69590
60	69789	305	69723	550	69656	795	69589
65	69788	310	69721	555	69655	800	69588
70	69786	315	69720	560	69653	805	69586
75	69785	320	69718	565	69652	810	69585
80	69784	325	69717	570	69651	815	69584
85	69782	330	69716	575	69649	820	69582
90	69781	335	69714	580	69648	825	69581
95	69779	340	69713	585	69647	830	69580
100	69778	345	69712	590	69645	835	69578
105	69777	350	69710	595	69644	840	69577
110	69775	355	69709	600	69642	845	69575
115	69774	360	69708	605	69641	850	69574
120	69773	365	69706	610	69640	855	69572
125	69771	370	69705	615	69638	860	69571
130	69770	375	69704	620	69637	865	69570
135	69769	380	69702	625	69636	870	69568
140	69767	385	69701	630	69634	875	69567
145	69766	390	69700	635	69633	880	69566
150	69765	395	69698	640	69632	885	69564
155	69763	400	69697	645	69630	890	69563
160	69762	405	69696	650	69629	895	69561
165	69760	410	69694	655	69628	900	69560
170	69759	415	69693	660	69626	905	69558
175	69758	420	69691	665	69625	910	69557
180	69756	425	69690	670	69623	915	69556
185	69755	430	69689	675	69622	920	69554
190	69754	435	69687	680	69621	925	69553
195	69752	440	69686	685	69619	930	69551
200	69751	445	69685	690	69618	935	69550
205	69750	450	69683	695	69617	940	69548
210	69748	455	69682	700	69615	945	69547
215	69747	460	69681	705	69614	950	69545
220	69746	465	69679	710	69612	955	69544
225	69744	470	69678	715	69611	960	69542
230	69743	475	69676	720	69610	965	69541
235	69742	480	69675	725	69608	970	69540
240	69740	485	69674	730	69607	975	69538

ISOTOPICALLY UNALTERED URANIUM 69803

## THEORETICAL WEIGHT PER CENT OF URANIUM IN



WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM
		245	76220	490	76163	735	76106
5	76276	250	76219	495	76162	740	76104
10	76275	255	76218	500	76161	745	76103
15	76274	260	76217	505	76160	750	76102
20	76272	265	76215	510	76158	755	76101
25	76271	270	76214	515	76157	760	76100
30	76270	275	76213	520	76156	765	76098
35	76269	280	76212	525	76155	770	76097
40	76268	285	76211	530	76154	775	76096
45	76266	290	76210	535	76152	780	76095
50	76265	295	76208	540	76151	785	76094
55	76264	300	76207	545	76150	790	76093
60	76263	305	76206	550	76149	795	76091
65	76262	310	76205	555	76148	800	76090
70	76261	315	76204	560	76147	805	76089
75	76260	320	76203	565	76146	810	76088
80	76258	325	76202	570	76144	815	76087
85	76257	330	76200	575	76143	820	76086
90	76256	335	76199	580	76142	825	76084
95	76255	340	76198	585	76141	830	76083
100	76254	345	76197	590	76140	835	76082
105	76253	350	76196	595	76138	840	76081
110	76252	355	76194	600	76137	845	76080
115	76250	360	76193	605	76136	850	76078
120	76249	365	76192	610	76135	855	76077
125	76248	370	76191	615	76134	860	76076
130	76247	375	76190	620	76133	865	76075
135	76246	380	76189	625	76132	870	76074
140	76244	385	76188	630	76130	875	76072
145	76243	390	76186	635	76129	880	76071
150	76242	395	76185	640	76128	885	76070
155	76241	400	76184	645	76127	890	76069
160	76240	405	76183	650	76126	895	76068
165	76239	410	76182	655	76124	900	76066
170	76238	415	76180	660	76123	905	76065
175	76236	420	76179	665	76122	910	76064
180	76235	425	76178	670	76121	915	76063
185	76234	430	76177	675	76120	920	76061
190	76233	435	76176	680	76118	925	76060
195	76232	440	76175	685	76117	930	76059
200	76231	445	76174	690	76116	935	76058
205	76229	450	76172	695	76115	940	76056
210	76228	455	76171	700	76114	945	76055
215	76227	460	76170	705	76113	950	76054
220	76226	465	76169	710	76112	955	76053
225	76225	470	76168	715	76110	960	76051
230	76224	475	76166	720	76109	965	76050
235	76222	480	76165	725	76108	970	76049
240	76221	485	76164	730	76107	975	76048

ISOTOPICALLY UNALTERED URANIUM 76275

## THEORETICAL WEIGHT PER CENT OF URANIUM IN



WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM	WEIGHT PER CENT U-235	THEORETICAL WEIGHT % URANIUM
5	69815	245	69751	490	69684	745	69615
10	69814	250	69749	495	69683	735	69617
15	69813	255	69748	500	69681	740	69616
20	69811	260	69746	505	69680	750	69613
		265	69745	510	69679	755	69612
25	69810	270	69744	515	69677	760	69610
30	69809	275	69742	520	69676	765	69609
35	69807	280	69741	525	69675	770	69608
40	69806	285	69740	530	69673	775	69606
45	69805	290	69738	535	69672	780	69605
50	69803	295	69737	540	69671	785	69604
55	69802	300	69736	545	69669	790	69602
60	69801	305	69734	550	69668	795	69601
65	69799	310	69733	555	69666	800	69600
70	69798	315	69732	560	69665	805	69598
75	69796	320	69730	565	69664	810	69597
80	69795	325	69729	570	69662	815	69595
85	69794	330	69728	575	69661	820	69594
90	69792	335	69726	580	69660	825	69593
95	69791	340	69725	585	69658	830	69591
100	69790	345	69724	590	69657	835	69590
105	69788	350	69722	595	69656	840	69588
110	69787	355	69721	600	69654	845	69587
115	69786	360	69719	605	69653	850	69586
120	69784	365	69718	610	69652	855	69584
125	69783	370	69717	615	69650	860	69583
130	69782	375	69715	620	69649	865	69582
135	69780	380	69714	625	69647	870	69580
140	69779	385	69713	630	69646	875	69579
145	69778	390	69711	635	69645	880	69577
150	69776	395	69710	640	69643	885	69576
155	69775	400	69708	645	69642	890	69574
160	69774	405	69707	650	69641	895	69573
165	69772	410	69706	655	69639	900	69572
170	69771	415	69704	660	69638	905	69570
175	69770	420	69703	665	69636	910	69569
180	69768	425	69702	670	69635	915	69567
185	69767	430	69700	675	69634	920	69566
190	69766	435	69699	680	69632	925	69564
195	69764	440	69698	685	69631	930	69563
200	69763	445	69696	690	69630	935	69562
205	69761	450	69695	695	69628	940	69560
210	69760	455	69694	700	69627	945	69559
215	69759	460	69692	705	69626	950	69557
220	69757	465	69691	710	69624	955	69556
225	69756	470	69690	715	69623	960	69554
230	69755	475	69688	720	69621	965	69553
235	69753	480	69687	725	69620	970	69551
240	69752	485	69686	730	69619	975	69550

ISOTOPICALLY UNALTERED URANIUM 69815